

Introduction

This manual describes the installation and the usage of EF800-SI. It features eight 10/100 Base-TX auto-negotiation switch port with internal AC power supply, and provides the flexibility to into your working space and networking environment. The switch EF800-SI can be served to connect with PCs, servers, hubs, bridges, other switches and routers. It can also act as a bridge between 10Mbps and 100Mbps network segments.

Thanks to the switching technology, it support 10Mbps and 100Mbps dedicated bandwidth in every port. The device is built with **Plug & Play, Auto-Negotiation** on all ports, as well as **Half And Full Duplex Operation, Store-and-Forward** and **Cut-Through** transmission mode for easy installation and smooth transition from legacy 10Mbps to 100Mbps. One uplink port (shared with port 1) to facilitate your network expansion. To ensure maximum safety and good function please read carefully and follow all the directions in this manual to get successful Installation and operation.

Package Contents

The EF800-SI package includes:

- 1 Switch, EF800-SI
- This user's manual
- 1 AC power cord
- 4 rubber foot stands

Mounting the Switch

Before installing the switch EF800-SI, be sure to find suitable location around the center of the

devices you want to link, and near a power outlet. Place the hub on any convenient flat surface, such as a desktop or nearby shelf. For more stability, you may put 4 rubber foot stands on the bottom side of EF800-SI, if necessary.

Attach Computers to the Switch Ports

1. Install a 10/100Mbps (10/100Base-TX) network adapter card and driver in every computer you want to network.
2. Prepare twisted-pair cables with RJ-45 plugs. Use Category 5/5e cable for all connections. Make sure that the cable length is less than or equal to 100 meters (328 feet).
3. Attach one end of the cable to the RJ-45 port of the computer's network adapter card and the other end to any available port of the switch EF800-SI. Be sure not using port 1 and the Uplink port simultaneously.

Cascading to a Switch or another Hub

When attaching the switch EF800-SI to a router or other devices, be sure to verify the port type implemented before connecting any cable.

- For straight-through Category 5/5e twisted –pair cable with RJ-45 plugs:
 1. Connect one end of the cable to the switch EF-800SI's uplink port, while keeping port 1 unplugged. Be sure follow the length limit of 100 meter.
 2. Connect the other end of the cable to any available port, except the uplink one, of the other devices.
- For crossover cabling:
 1. Connect, respectively, any two available non-uplink port of these 2 devices.
 2. Or, connect both uplink ports of these 2 devices together.

Verify System Operation

Check each connection by viewing the port status indicators shown in the following table. The switch EF800-SI monitors various statuses for every port. If there is any abnormal condition, please follow the trouble-shooting advice detailed in the next section.

Troubleshooting by the Diagnostic LED Indicators

LED	State	Indication
Power	On	EF800-SI is powered.
	Off	EF800-SI is not powered.
LNK/ACT	On	Port has established a valid network connection.
	Off	Port has not established a valid network connection
	Flashing	Traffic is traversing the port.
100Mbps	On	Port runs at 100Mbps.
	Off	Port runs at 10Mbps.
FDX/COL	On	Port operates in full-duplex mode or collision in half-duplex mode.
	Off	Port operates in half-duplex mode without collision.

The operation of EF800-SI can be easily monitored through panel LED indicators to assist the network manager in identifying problems. This section describes some common problems you may encounter and together with possible solutions, as shown in following.

Symptom:	Power LED does not light up after alternating current being Afforded.
Cause:	Defective power outlet or power cord.
Solution:	Check the power outlet by plugging in another device that functions properly. Or check the power cord with another device.

Symptom:	The LED's, except the power one, don't light down after Power on.
Cause:	RESET functions improperly.
Solution:	Power on again.

Symptom:	LNK/ACT LED does not light up after proper connection.
Cause:	Network interface (e.g., a network adapter card on the Attached device), network cable, or switch port is defective.
Solution:	Verify that the switch EF800-SI and the attached device are powered. Be sure the cable is correctly plugged into both the switch EF800-SI and the corresponding device. Verify that the proper cable type is used and its length is not more than 100 meter (328 feet). Check cable connection and the power cord for possible defects. Replace the defective cable or cord if necessary.

General Specification

Standard Compliance	IEEE 802.3u & 802.3x 100Base-TX Fast Ethernet, IEEE 802.3 10Base-T Ethernet
Number of Ports	8 10/100Mbps Auto-Sensing RJ-45 Ports 1 Uplink Port (Used Instead of Port 1)
Data Transfer Rate	Fast Ethernet: 100Mbps (Half Duplex), 200Mbps (Full Duplex) Ethernet: 10Mbps (Half Duplex), 20Mbps (Full Duplex)
Network Cables	Unshielded Twisted-Pair Cable
Topology	Star
LED Indicators	Power, Link/Activity, 100Mbps, Full Duplex/Collision

Performance Specification

Transmission Method	Store-and-Forward & Cut-Through
MAC Address Table	8K Entries
Packet Buffer	2M Bits Embedded DRAM
Maximum Forwarding Rate (64byte packets)	14,8800 pps/100Base-TX 14,880 pps/10Base-TX
Maximum Filtering Rate (64byte packets)	14,8800 pps/100Base-TX 14,880 pps/10Base-TX
Duplex Mode	Supports Both Half and Full Duplex Modes
Flow Control	IEEE 802.3x (Full Duplex) Back-Pressure (Half Duplex)

Physical & Environmental Specification

Power	100~240 VAC, 50~60Hz
Dimensions	210mmx115mmx39mm (Lxwxh)
Weight	0.7kg/1.61b
Operating Temperature	0~45 °C/31~113 °F
Humidity	10~90%(Non-Condensing)

FCC Class A Certification

Warning: This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A digital device pursuant to Subpart B of Part 15 FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment operation of this equipment in a residential area is likely to cause interference, in which case the user, at this own expense, will be required to take whatever measure are required to correct the interference.

CE Mark Declaration of Conformance

This is to certify that this product complies with ISO/IEC Guide 22 and EN45014. It conforms to the following specifications:

EMC: N55022(1988)/CISPR-22(1985) Class A

IEC 1000-4-2(1995)	4Kv cd,8Kv AD
IEC 1000-4-3(1995)	3V/m
IEC 1000-4-4(1995)	1Kv-Power Line 0.5Kv-Signal
Line	
IEC 1000-4-6(1995)	3Vrms

This product complies with the requirements of the low Voltage Directive 73/23/EEC and the EMC directive 89/336/EEC.

Warning

Do not plug a phone jack connector into any of the RJ-45 port. This may damage the hub.